ABSTRACT

An automated water control valve for disabling water flow to an appliance includes a shell having a water inlet and a water outlet. A solenoid valve selectively disables water flow through the device. A sensing channel includes a spring-biased magnet that migrates towards a Hall effect device in the event that water pressure at the outlet is less than the inlet water pressure, i.e., such as when water is flowing to the appliance. The magnet becomes substantially aligned with the Hall effect device which in turns instructs a microprocessor to open the solenoid valve. When the appliance is properly operating and water flow thereto is disabled, pressure at the outlet will equalize with that of the inlet allowing the magnet to return to its original position thereby instructing the microprocessor to close the solenoid valve. In the event that the microprocessor does not receive the requisite control signal, i.e., the appliance or supply line is malfunctioning and resulting in continuous water flow, a timer will close the solenoid valve upon the expiration of a predetermined duration.